
TOWN OF FALMOUTH, MEMORANDUM

TO: NATHAN POORE
FROM: PETE CLARK
SUBJECT: COUNCIL DISCUSSION OF SEWER, ORDINANCE ISSUES
DATE: 8-10-17
CC: PETER MCHUGH, THEO HOLTWIJK

The Town Council is scheduled to discuss several matters related to sewer operations and service at their meeting on August 14. At that meeting, there will also be a discussion and introduction of an amendment to the Code of Ordinances, Article II, Section 18-2 Sewer Systems. The amendment will address three areas of the ordinance:

- A. **Connection Charges.** Connection charges are typically charged for any new or expanded service connection to the system. The proposed amendment will propose to change the current flat fee structure which has been in effect for many years to a fee based on updated undepreciated audit value of the entire system and the anticipated flow from the proposed new or expanded use. Exhibit A illustrates a formula to calculate what we would call an equity buy-in fee rather than a “connection charge”. The formula takes into consideration the value of the system and the projected flow of the use (small versus larger residential uses).
- B. **Exempt from Connection Charges.** The ordinance currently exempts a charge for any new use if the developer extends sewer and the town accepts the new extension as public sewer.

We believe the original intent of the exemption was to encourage private investment in public infrastructure to benefit future and current users of the system. An example would be a developer extending sewer 2000 feet down a public road to serve a new development. Presumably, those private property owners along the new extension would now have access to the system. In this case, the public benefits from the private investment. In some cases, extensions have been built within new developments where the sewer exclusively serves only the development. It is difficult to label this type of extension as a public benefit when it only serves the new development area.

- C. **Multiplex – Apartment.** The current sewer fee schedule lists both apartment and multi-plex. Neither is defined in the ordinance. The established fee for an apartment is equivalent to a house, \$2000. The fee for a multiplex is derived from either the frontage or area of the lot. We are not aware of any historic use of the multi-plex rate. Should the Council support the proposed equity buy in fee as a replacement of the connection fee, we are proposing a new associated fee schedule based on the comparative size of new connections, rather than how it might be otherwise described.

Staff has been contemplating these changes and the timing is now appropriate to modernize the ordinance and practice which will provide for increased fairness and equity while also enhancing revenues to support anticipated capital projects. The proposed ordinance language is incorporated into a formal Ordinance Introduction and attached to this memo as Appendix A. Council action would be required to both amend the ordinance to implement the equity buy in fee and a new fee schedule based on the relative flow expected from new connections.

Sewer user charges, which are billed monthly, make up the primary share of revenue to fund the operations of the wastewater department. The rate is set by the Town Council and has been subject to change on a regular basis. The connection charge has not been reviewed or adjusted for many years. We believe that updating both rates on a regular basis will provide enhanced revenue balance, diversification, and better support for capital investments to keep the system modern and to accommodate growth in the town.

The sewer user rate structure sets a flat rate for residential properties and scaled charge for commercial properties based on the number and type of plumbing fixtures. There have been past requests to review the rate structure and consider the viability of basing rates on water use. Those reviews were informative for staff and prior Town Councils, however, the challenges and concerns for such a change did not result in a shift toward a water use fee system. Appendix B of this memo describes a summary of previous reviews to consider water use in the rate structure. We offer this review to the Council because it is often discussed when changes are requested to any portion of the sewer operations revenue structure.

Appendix A

Proposed Code of Ordinance Amendment

Article II Section 18-2 Sewer System

We respectfully request Town Council consideration of amending the Town Ordinance related to sewer connection fees and the associated sewer connection fee schedule. We propose deleting references to “connection charges” and propose an alternate “equity buy in fee” and a new fee schedule based on the relative use of the sewer systems by new connections and the prevailing undepreciated equity of past investment in the sewer system.

We also propose amending the current exemption language to eliminate exemption from the proposed new buy-in fee.

Suggested ordinance changes are as follows:

Sec. 18-131. ~~Connection charges~~ **Equity buy-in fees**; permit fees; accounting.

(a) A schedule of permit fees and ~~connection charges~~ **equity buy-in fees** established for the connection of any building or property to a sanitary, combined or interceptor sewer within the town whether constructed by the town or the Portland Water District or conveyed to the town is on file in the town clerk's office.

(b) Permit fees and ~~connection charges~~ **equity buy-in fees** shall be due and payable upon application for a sewer connection permit. The town council may by order readjust the amounts of the ~~connection charges~~ **permit fees and equity buy-in fees**. ~~according to the then-prevailing costs of construction and the anticipated number of such connections.~~ **Equity buy-in fees shall annually be adjusted by Council Order based on the undepreciated audit value of the sewer enterprise for the previous fiscal year and the capacity assessment of the proposed new connection.** ~~Such connection charges shall not be required for connections from any property assessed for a portion of the cost of sewer construction under section 18-233.~~

(c) The funds collected by the town as sewer ~~connection charges~~ **equity buy-in fees** shall be placed in ~~a separate~~ **the sewer capital improvement** fund for future sewer construction, sewer debt retirement, contributions to sewer capital costs and any other sewer-related purposes which do not conflict with the Clean Water Act, 33 U.S.C. § 1251 et seq., or its successor provisions and applicable federal regulations.

(Ord. of 8-26-85, § 5.1)

Sec. 18-233. ~~Exemption from connection charges.~~ **Repealed**

~~Any property owner, builder or developer who constructs, or contractually participates in the construction of a sewer extension pursuant to section 18-231 which sewer extension is then conveyed to the town shall not be charged a sewer connection fee under section 18-131.~~

(Ord. of 8-26-85, § 8.4)

Appendix B

Sewer User Fee Rates – Water Use and Flat Fee Structure

Falmouth's user fee structure dates to the inception of the department in 1970 without any significant changes other than periodic rate adjustments. One exception was when the Town decided to eliminate a provision that charged a higher fee for residential users of excess water because the costs to obtain usage data were higher than the revenue generated from the excess water use. The residential rate is flat and does not differentiate between larger and smaller homes or homes that are only seasonally occupied. The commercial rate is set to be proportionally relative to the residential rate. The commercial rate structure includes additional charges when water use is unusually high. This provision only applies to a very few commercial accounts, such as a car wash. If the commercial property is comprised of more than the typical equivalent residential fixture units, the fee is scaled upward based on the type and number of plumbing fixtures. We believe that the current fee structure treats sewage disposal as a basic service encompassing a high threshold of water use before the concept of basic service is exceeded.

The Town has analyzed the option to base fees entirely or in part on water usage. The findings of these past reviews and analysis includes the following highlights:

- There have been very few complaints about the existing structure.
- Most of the department's costs are not directly flow related. In a few cases, expenses are associated with flow such as electricity and chemicals that are used in the treatment process. Water use fee systems require metering and data collection. The Town could utilize data through the Portland Water District metering system, however, the cost to obtain the data for billing purposes is currently \$35,728 annually.
- Some users would need to install additional meters to separate excess water use that does not drain into the sewer system, such as for irrigation.
- A rate can be blended with a base flat fee and the remaining fee based on water use.
- A Portland Water District rate consultant estimated a potential 10% reduction in water use from a shift to consumption for billing if the significant majority of the fee was based on water use.

In a previous analysis, staff reviewed water usage from 2007 and developed a model for user fee impact on properties based on a complete shift to a consumption based fee. That review indicated, of 1759 accounts studied, the user fee for would increase for 933 accounts. Data was collected during non-summer months (less use of irrigation systems), which is more representative of actual sewer flow. The following table shows the projected impact on these 933 accounts.

Distribution of accounts that increase using 2007 water use data								
Percent increase	0-10%	11-25%	26-50%	51-75%	76-100%	100-200%	200-300%	>300%
Number of accounts	124	120	212	163	108	166	23	17

The findings indicate a major reapportionment, impacting several hundred users. Staff concluded at the time of analysis that a full shift to consumption based charges would introduce significant volatility as an alternate to a stable and predictable system. That view has not changed, nor the factors influencing the conclusion, which is based on the following:

- Cost to obtain data
- History of successful rate structure
- Very few complaints from users
- Relatively low and stable rate when compared to other sewer departments and districts
- Most operation costs are not impacted by changes in flow
- Significant negative fee impact to most users

While there is a desire to have an equitable fee structure, the negative aspects of a change to water usage has made this change too difficult. The current fee is relatively low and when the base fee is so low, a change to water usage creates a dramatic change for many users.

Exhibit A

Equity Buy-in Fee

The current connection fees are dedicated to capital reserves and have not increased for many years. This fee should increase to support anticipated capital projects. It should also be restructured to correlate to the value of the system and projected flows based on the use. If the fee was based on the value of the system, a better name for the fee would be “equity buy-in”. The suggested buy-in amount would be calculated from the undepreciated value of sewer assets from the annual audit and the projected flow from the new user. An equity buy-in fee should be universally applied and the current exemption eliminated. The following table describes how the fee could be calculated.

DRAFT, Average use caculation	
A. Latest census population (2010)	11,185
B. Residential housing units (assessing records)	4715
C. Average persons per household (A / B)	2.37
D. Average sewer use per person	60
E. Residential, average use (C x D)	142
DRAFT, Equity calculation	
F. Assets	\$37,563,928.75
Land	\$350,000.00
Capital assets, construction in progress	\$926,496.00
Remainder of Mill Creek construction in progress FY17	\$5,549,000.00
Capital assets, building improvements	\$11,499,818.68
Capital assets, equipment and machinery	\$4,238,976.18
Capital assets, infrastructure	\$11,917,315.89
Capital improvement fund balance	\$2,332,322.00
Undesignated fund balance	\$750,000.00
G. Adjustments	\$12,649,743.00
Depreciation, building improvements	\$5,026,567.00
Depreciation, equipment and machinery	\$2,150,911.00
Depreciation, infrastructure	\$5,472,265.00
Grants	\$0.00
H. Equity (F - G)	\$24,914,185.75
DRAFT, Equity buy in fee calculation	
I. Equity value (million \$);	\$24.91
J. plant capacity, Falmouth share MGD;	1.092
K. equity per gallon per day of capacity (I / J)	\$22.82
L. gpd per residential unit (E)	142
M. equity buy in fee for the average residential unit (K x L)	\$3,247.35

This example results in an equity buy-in fee that would be \$3,247 for the average residential unit. Larger or smaller living spaces and commercial uses would then need to be scaled from this base charge. One possible approach would be based on the number and type of fixtures and relative size of the structure using the number of bedrooms. Examples of this possible method are shown in the next table.

In this example, the rate is calculated from standard fixture units that comprise the method of calculating service charges for commercial sewer accounts in Falmouth. Equity buy-in fees for new or expanded commercial properties could be similarly scaled, proportional to the average residential use. We believe this methodology provides a scaled and fair way to assess the impact of future development, relative to required capacity needs.

EXAMPLES	Rate	1-2 bedroom	1-2 bedroom	Base unit	4 bedroom	5 bedroom	>5 bedrooms
		1-3 users	1-3 users	3 bedroom 2-4 users	3-5 users	5-6 users	>6 users
Kitchen	6	6	6	6	6	6	6
Full bath	11	11	11	11	11	11	11
1/2 bath	7				7	11	11
Washer	8		8	8	8	8	8
Bedroom adjustment	+4	-4	-4		4	8	8
	Total	13	21	25	36	44	51
	Ratio	52%	84%	100%	144%	176%	204%
	Rate	\$1,688.44	\$2,727.48	\$3,247.00	\$4,675.68	\$5,714.72	\$6,623.88